SUMMARY

The present invention discloses the differential expression of the minor vault protein ADPRTL1 gene in specific brain regions of Alzheimer's disease patients. Based on this finding, this invention provides a method for diagnosing or prognosticating Alzheimer's disease in a subject, or for determining whether a subject is at increased risk of developing Alzheimer's disease. Furthermore, this invention provides therapeutic and prophylactic methods for treating or preventing Alzheimer's disease and related neurodegenerative disorders using a gene coding for a vault protein, in particular the gene coding for the minor vault protein ADPRTL1. A method of screening for modulating agents of neurodegenerative diseases is also disclosed.